GE
Lighting Solutions

GUIDE FORM SPECIFICATIONS

GE EVOLVE™ LED Series Garage Parking Deck Luminaire

GENERAL STATEMENT

The GE Evolve™ LED Series Parking Deck Luminaire is a system that provides an high efficiency, advanced LED optical system providing high uniformity and excellent vertical light distribution with reduced glare and effective security light levels.

OPTICAL SYSTEMS REQUIREMENTS

The Luminaire shall have:

1. Structured LED array's for optimized vertical light photometric distribution
2. An Evolve™ Light Engine system with directional reflectors designed to optimize application efficiency and minimize glare
3. An IP 65 rated optical enclosure
4. An Injection Molded Acrylic Lens
5. LED Printed Circuit Board Assemblies utilizing a Metal Core Printed Circuit Board

PHOTOMETRIC REQUIREMENTS

The Luminaire shall have:

1. A nominal Correlated Color Temperature (CCT) of 6000 ºK
2. A typical Color Rendering Index (CRI) ≥ 70.
3. An option for "uplight" to increase light above the fixture.
4. A minimum initial Luminaire Efficacy ≥ 65 lm/W
6. Photometric configurations:

Photometric Type Designator	Watts	Initial Lumen Output
Narrow	125	8115
Wide	125	8115
Wide	95	6485
Wide	80	5250
Wide with Uplight	125	8115
Wide with Uplight	95	6485
Wide with Uplight	80	5250

ELECTRICAL SYSTEMS REQUIREMENTS

The Luminaire shall have:

1. Off-state power draw of 0 watts (excluding remote control devices)
2. A minimum power factor of .90.
3. A nominal LED forward current ≤ 350 mA.
4. Transient voltage and surge suppression capability that meet or exceeds the requirements of ANSI/IEEE C.62.41-1991 Location category B2 (4kV/2kA) for 8/20us Combination Wave transients. The transient test condition shall consist of 5 strikes per mode, polarity, and phase condition (120 transients total) per the test protocol of IEC 61000-4-5 Ed 2 with Class B performance results.
5. An operating temperature range of -40º C to 40º C.
6. UL Class 2 power supply units (i.e. drivers) operating in DC constant current mode supplying DC forward current for LED operation (no pulsed operation allowed)
7. Compliance with FCC 47 CFR Part 15/18 Class B.
8. A Class A sound rating.

WARRANTY REQUIREMENTS

1. A limited system warranty must be provided for the replacement or repair of the luminaire due to any electrical failure (including light source and or power supplies/drivers) for five (5) years.

MECHANICAL REQUIREMENTS

The Luminaire shall have:

1. maximum dimensions of 19.0 inches of length, 19.0 inches of width, and 7.8 inches of height (without mounting options)
2. Weight ≤ 26 pounds.
3. normal operation in temperatures from -40º C to 40º C.
4. A housing construction:
   a. of die cast aluminum
   b. finished with corrosion resistant polyester powder paint, minimum 2.0 mil thickness, gray or white in color.
   c. with internally mounted driver(s)
   d. corrosion resistant fasteners
   e. incorporating heat sink fins that are integrally cast with the housing to maximize heat transfer and minimize thermal impacts of environmental conditions such as debris-clogged fins.
5. a vibration rating of 2G per ANSI C136.31-2001

LED MODULE/ARRAY REQUIREMENTS

1. LED module(s)/array(s) shall deliver at least 85% of initial lumens, when installed for a minimum of 50,000 hours.

MEASUREMENT/PERFORMANCE/SAFETY STANDARDS

1. IESNA LM-79-08- Approved method for the electrical and photometric measurements of solid-state lighting products.
2. IESNA LM-80-08 (Recommended) Approved method for measuring lumen maintenance of LED lighting sources.
3. Luminaire listed as UL 1598 approved